SURFACE WATER TREATMENT RULES MONTHLY REPORTING FORM FOR COMBINED FILTER EFFLUENT (CFE) TURBIDITY
(Due to EPA by 10th day of the following month)

Month **September** Year __2019__   PWS ID# 104101247   Water System Name: Warm Springs Water Treatment Plant

CFE TURBIDITY MUST BE REPORTED EVERY 4 HOURS. FILL IN THE TIME CFE TURBIDITY IS MEASURED IN THE TABLE BELOW

IF PLANT IS OFF AT THE TIME OF THE REQUIRED 4-HOUR READING, INDICATE "PO" IN THE APPROPRIATE BOX

** THE DAILY MAXIMUM TURBIDITY VALUE REPORTED IN THE LAST COLUMN OF THE TABLE BELOW, FOR A PARTICULAR DATE, SHOULD

DO NOT REPORT RESULTS COLLECTED DURING BACKWASH, FILTER-TO-WASTE, OR ANY TIME WATER IS NOT BEING PRODUCED FOR CONSUMPTION

**IF THE MAXIMUM TURBIDITY LEVEL EXCEEDS 1.49 NTU ON ANY DAY, CONTACT LISA JACOBSEN (EPA) AT (206) 553-6917 AS SOON AS POSSIBLE BUT NO LATER THAN 24 HOURS AFTER THE EXCEEDANCE

Date	Time - 0400	Time - 0800	Time - 1200	Time - 1600	Time - 2000	Time - 000	**DAILY Max NTU
1	PO	0.12	0.12	0.12	PO	0.12	0.12
2	PO	0.11	0.12	0.12	0.11	0.12	0.12
3	PO	PO	0.12	0.12	0.09	0.11	0.12
4	PO	0.12	0.12	0.12	0.12	0.11	0.12
5	PO	0.12	0.12	0.12	0.12	0.12	0.12
6	PO	PO	0.12	0.12	0.12	0.11	0.12
7	PO	0.11	0.12	0.12	PO	0.1	0.12
8	PO	0.13	0.13	0.12	0.12	0.12	0.13
9	PO	0.12	0.12	0.12	0.12	0.11	0.12
10	PO	0.11	0.11	0.12	PO	PO	0.12
11	PO	0.12	0.12	0.12	0.12	0.12	0.12
12	PO	0.11	0.12	0.12	0.12	0.11	0.12
13	PO	0.11	0.12	0.14	0.13	0.13	0.14
14	PO	0.12	0.11	0.11	0.12	PO	0.12
15	PO	0.12	0.12	0.12	0.12	0.12	0.12
16	PO	0.12	0.12	0.12	0.12	PO	0.12
17	PO	0.12	0.12	0.12	PO	PO	0.12
18	PO	0.11	0.11	0.11	0.11	PO	0.11
19	PO	PO	0.12	0.12	0.1	PO	0.12
20	PO	0.12	0.12	0.12	0.08	PO	0.12
21	PO	0.13	0.13	0.12	0.11	PO	0.13
22	PO	0.12	0.12	0.12	0.12	0.12	0.12
23	PO	0.12	0.12	0.12	0.12	PO	0.12
24	PO	0.12	0.12	0.12	0.11	PO	0.12
25	PO	0.11	0.11	0.11	0.12	PO	0.12
26	PO	0.1	0.11	PO	0.1	0.11	0.11
27	PO	0.09	0.11	0.12	0.12	PO	0.12
28	PO	0.08	0.09	0.07	0.07	PO	0.09
29	PO	0.06	PO	0.06	0.07	PO	0.07
30	PO	0.06	0.05	0.06	0.05	PO	0.06

A. Total number of reported Combined Filter Effluent (CFE) turbidity measurements = _____127_____

B. Total Number of reported CFE turbidity measurements that are less than or equal to **0.3** NTU = _____127_____

C. DATE OF LAST CALIBRATION OF CFE TURBIDIMETE__8-27-19_____

Operator Signature _____   Date Submitted _____

Month __September__ System Name - Warm Springs Water Treatment Plant   PWS ID **104101247**
Year __2019__   Type of Filtration - Conventional

Combined Filter Effluent Turbidity Performance Criteria

A. Total number of Combined Filter Effluent (CFE) turbidity measurements (from page 1) = | 127 |
B. Total Number of CFE turbidity measurements that are less than or equal to **0.3** NTU (from page 1) = | 127 |
C. The percentage of CFE turbidity measurements meeting 0.3 NTU = B / A * 100 = _____ | 100.00 | %
D. Is number in C less than 95%?   ☐ yes   ☑ No
E. Record the date and turbidity value for any CFE measurements exceeding 1.49 NTU below: If none, enter "none":

Note: A system is in violation if the answer to "D" is "yes".

Time and Date of Exceedance	Turbidity (NTU) value(s) > 1.49	Time and Date EPA Was Notified
None		

Disinfection Performance Criteria

A. Point-of-Entry (POE) Minimum Disinfectant Residual Criteria
The minimum residual concentration, measured as free chlorine must not drop below **0.2** mg/L (or a higher value if advised by EPA) for adequate inactivation of Giardia and viruses.

Date	Minimum Disinfectant Residual at Point of Entry to Distribution System (mg/L)	Date	Minimum Disinfectant Residual at Point of Entry to Distribution System (mg/L)	Date	Minimum Disinfectant Residual at Point of Entry to Distribution System (mg/L)
1	0.78	11	0.63	21	0.68
2	0.74	12	0.61	22	0.65
3	0.75	13	0.7	23	0.79
4	0.57	14	0.59	24	0.72
5	0.63	15	0.57	25	0.57
6	0.51	16	0.69	26	0.72
7	0.71	17	0.64	27	0.72
8	0.75	18	0.73	28	0.82
9	0.72	19	0.77	29	0.69
10	0.65	20	0.71	30	0.78

Days where the POE Residual was less than 0.2 mg/L for more than 4 hours		
Time/Day	Duration of Low Level (indicate hrs)	Time and Date Reported to EPA
None		

B. Distribution System Disinfectant Residual Criteria MEASURED WHEN TAKING TOTAL COLIFORM SAMPLES

A = # of times during the month a disinfectant residual measurement was taken in the distribution system = | 4 |
C = # of distribution system samples this month that disinfectant residual was NOT detected = | 0 |
V = C / A * 100 = | 0.00 | %   For the previous month, V = _____ %

Note: A system is in violation if the residual disinfectant concentration is undetectable in more than 5 percent of the samples each month, for any two consecutive months that the system serves water to the public

Operator Initials _____   Date _____

INDIVIDUAL FILTER EFFLUENT (IFE) MONITORING REPORT

(Due to EPA by 10th day of the following month)

Summary of Individual Filter Effluent Monitoring Results for ___**September 2019**___

1. Was continuous monitoring of the Individual Filter Effluent (IFE) turbidity conducted during the month?

No ☐   Yes ☐ x

2. Was the IFE turbidity recorded at least every 15 minutes?[1]

No ☐   Yes ☐ x

3. Was there a failure of the IFE's continuous monitoring equipment?[2]

No ☒   Yes ☐

4. Was the IFE turbidity for any filter greater than 1.0 NTU in two consecutive 15 minute readings?

No ☒   Yes ☐

If yes, submit the Turbidity Exceedance Report Form (page 4) with this monthly report.

☐ ☐

5. Was the IFE turbidity for the same filter greater than 1.0 NTU in 2 consecutive 15 minute readings during the past 3

No ☒   Yes ☐

If yes, call Lisa Jacobsen at (206) 553-6917 for Filter Self-Assessment instructions

If yes, enter date Individual Filter Self-Assessment was triggered: ☐

If yes, enter date Individual Filter Self-Assessment was completed: ☐

6. Was the IFE turbidity of the same individual filter greater than 2.0 NTUs in 2 consecutive 15 minute readings during the

No ☒   Yes ☐

If yes, call Lisa Jacobsen at (206) 553-6917 to arrange for a Comprehensive Performance Evaluation
and answer question #7

7. If the answer to #6 above is "Yes", a Comprehensive Performance Evaluation (CPE) must be arranged within 60 days

No ☐   Yes ☐

Indicate the date the CPE was triggered: ☐

Indicate the scheduled CPE date: ☐

[1]Individual Filter Effluent continuous monitoring results do not need to be submitted to EPA each month. The 15 minute recordings

[2]If there is a failure of the continuous monitoring equipment, systems may take grab samples of the IFE turbidity every four hours in lieu

[3]Filter Self Assessment reports must be kept on-site for 3 years.

Operator Initials _____   Date _____

INDIVIDUAL FILTER EFFLUENT (IFE) PERFORMANCE
TURBIDITY EXCEEDANCE REPORT

Did any filter exceed 1.0 NTU in 2 consecutive 15 minute readings?   Yes _____   No ___x___

Filter #:					
Date Exceedance Occurred:					
Time Occurred:					
Duration of Exceedance:					
Highest Turbidity Level (NTUs):					
Is reason for exceedance known?					

Reason for each exceedance, if known *(select all that apply)* :

Filter Problems					
Post-Backwash Turbidity Spike					
Prolonged Filter Run Time					
Excessive Filter-Loading Rate					
Rate-of-Flow Control Valve Failure					
Media Defects (Insufficient depth, mud balls, etc.)					
Inadequate Surface Wash or Backwash Facilities					
Turbidimeter Errors					
Incorrect Calibration					
Air Bubble					
Debris					
Backwash Artifact					
Chemical Feed Equipment Failure					
Coagulant					
Coagulant Aid					
Filter Aid					
Raw Water Quality					
Raw Water Turbidity Unusually High					
Other Major Treatment Process Failures or Maintenance					
Did the same filter have an exceedance last month?					

Comments:

(If more than one exceedance occurred during the month, include filter #, date and time with each comment.)

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Operator Initials _____   Date _____